## **ABSTRACT**

A method of extracting a polypeptide of interest from a fermentation broth comprising:

- i) adjusting the pH close to pI of the polypeptide of interest;
- 5 ii) adding a non-ionic surfactant with a hydrophile-lipophile balance (HLB) of 12 or lower;
  - iii) cooling the mixture for solubilization and incubating at above cloud point for extraction;
  - iv) phase separating at below cloud point to obtain liquid-liquid-solid fractions; and
- 10 v) recovering the surfactant-rich top phase containing the polypeptide of interest.